



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

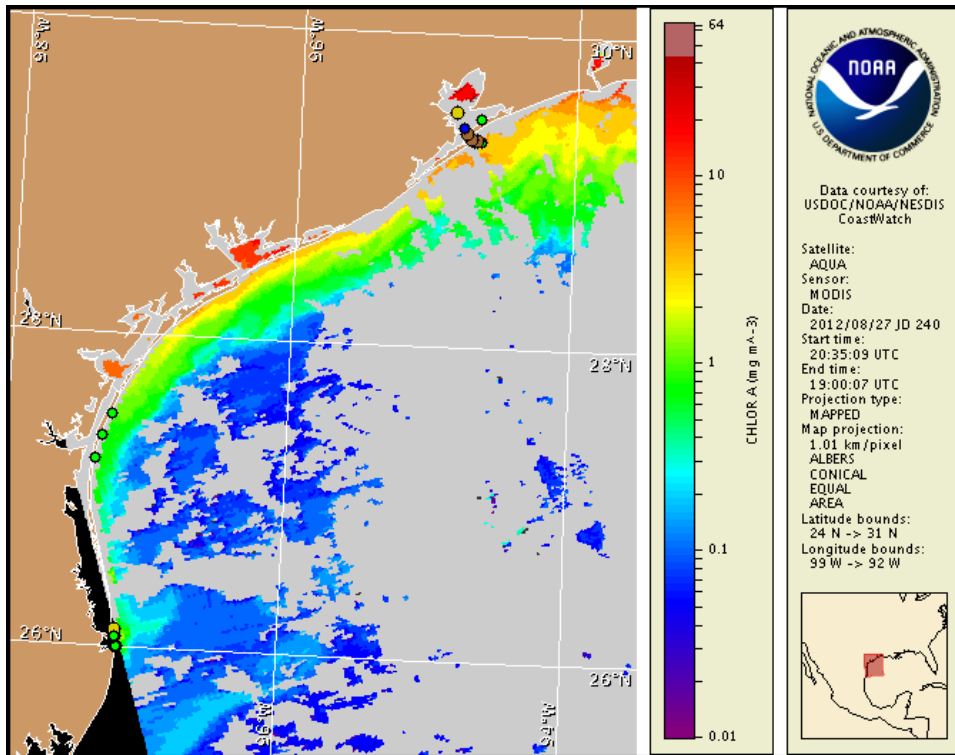
Thursday, 30 August 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, August 27, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from August 20 to 29 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

A patchy harmful algal bloom of *Karenia brevis* (commonly known as Texas red tide) is present along the Texas coast, in the Galveston and South Padre Island regions. Patchy moderate respiratory impacts are possible in the Galveston and South Padre Island regions today through Monday. No additional respiratory impacts are expected at the coast in Texas today through Monday, September 3. For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Analysis

****Due to the upcoming Federal Holiday, the next bulletin will be issued on Tuesday, September 4.****

A harmful algal bloom of *Karenia brevis* was last identified in the South Padre Island region, from 'low a' to 'low b' samples collected from both the gulfside and within the lower Laguna Madre, on August 24 (TPWD). No *K. brevis* was identified from additional samples collected alongshore the southern tip of South Padre Island from the UTPA Coastal Studies Lab, Brazos Santiago Pass, and the Isla Blanca boat ramp early this week (TPWD; 8/27-28). Padre Island National Seashore staff monitoring the coastline reported no dead fish or other impacts from the South Padre Island area in the last week (TPWD; 8/27-29). Forecasted winds along- and onshore the South Padre Island area, in areas positive for 'low b' concentrations of *K. brevis*, could promote the potential for patchy moderate respiratory impacts from Friday through Monday, September 3.

No recent samples have been received from the Galveston region where previous samples indicated 'very low b' to 'medium' concentrations of *K. brevis* (TPWD, TDSHS; 8/20-8/24).

Recent MODIS imagery (8/27; shown left) is partially obscured by clouds along- and off-shore the Texas coast, limiting analysis. Elevated chlorophyll (3 to 6 $\mu\text{g/L}$) is visible stretching along- and offshore from Sabine Pass to San Luis Pass. Elevated chlorophyll is not necessarily indicative of the presence of *K. brevis* and could also be due to the resuspension of benthic chlorophyll and sediments along the coast. In situ sampling is necessary to confirm the presence of *K. brevis*.

Forecast models based on predicted near-surface currents indicate a maximum bloom transport from coastal sample locations of 20 km north from the Galveston region, >150 km north from the Boca Chica Beach region, and a potential transport of 15 km north from the Port Aransas region from August 27-September 2.

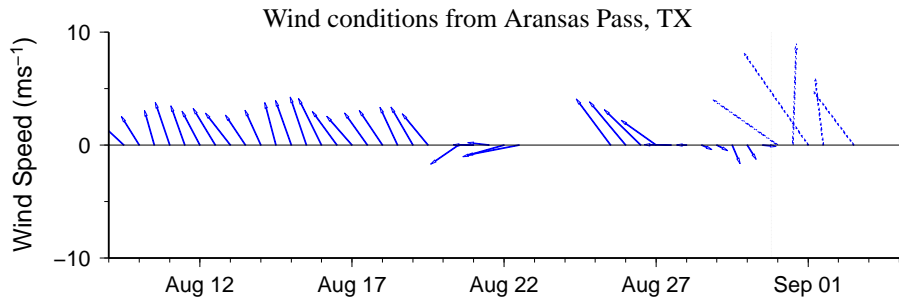
Davis, Kavanaugh

Wind Analysis

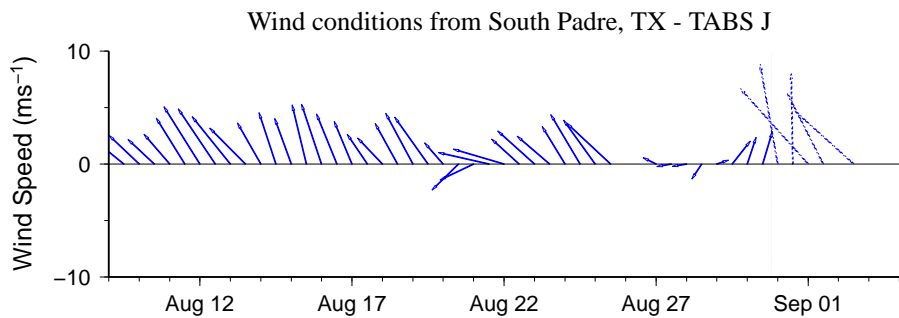
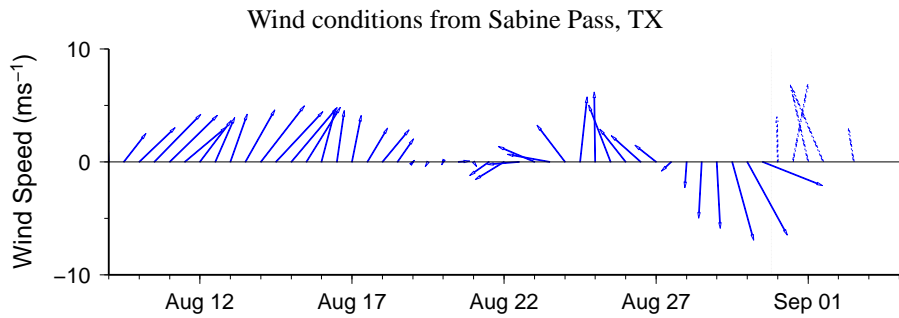
Galveston: Northwest winds (15 kn, 8 m/s) today becoming southwest winds during the afternoon. South winds (15-20 kn, 8-10 m/s) tonight. South winds (5-15 kn, 3-8 m/s) Friday through Monday.

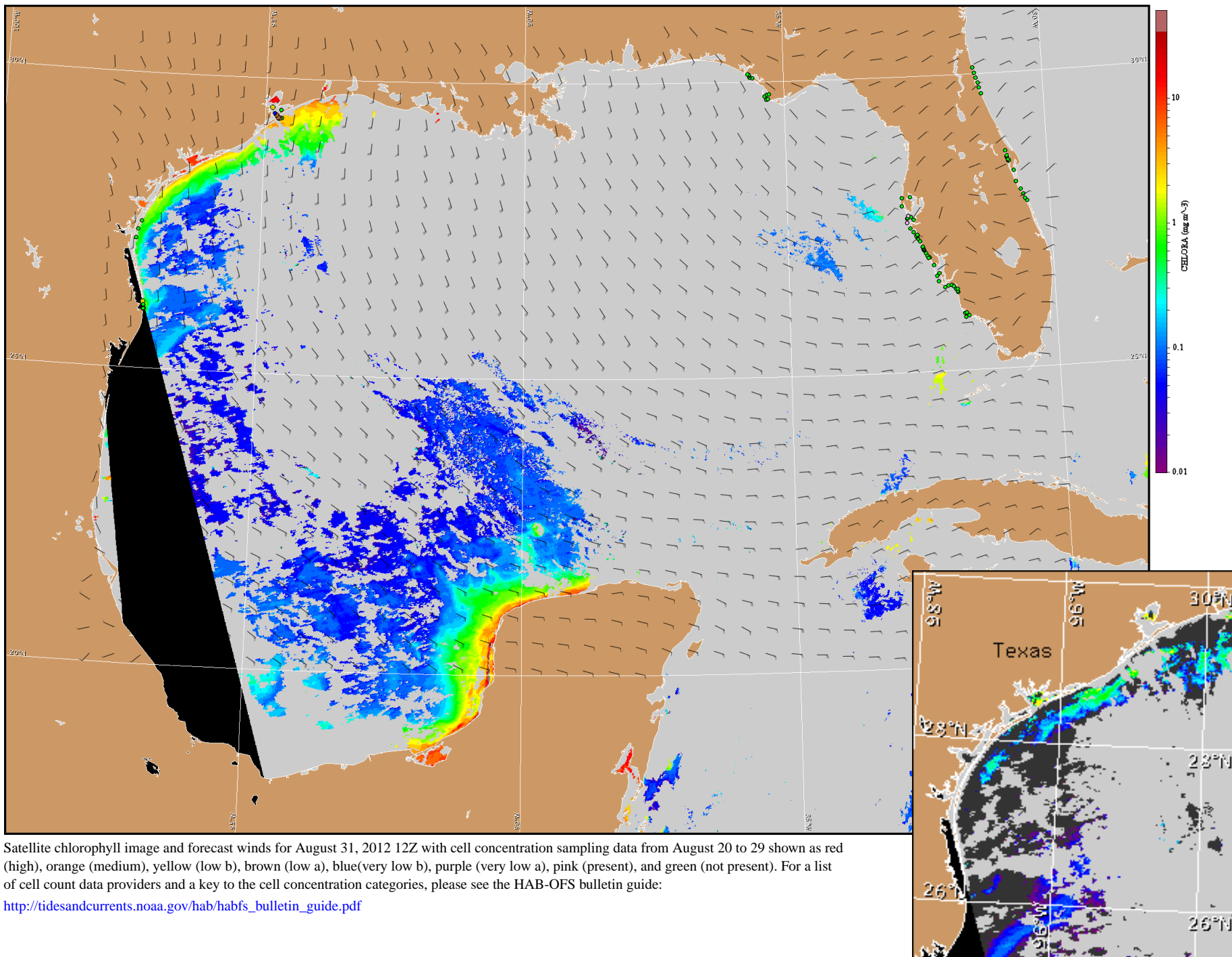
Port Aransas: Northwest winds (5-10 kn, 3-5 m/s) today becoming southwest winds later. South winds (10-15 kn, 5-8 m/s) tonight through Friday. Southeast winds (15-20 kn) Friday night. South winds (10-15 kn) Saturday through Sunday becoming southeast winds (10-15 kn) Sunday night.

South Padre: Light winds becoming southeast winds (10 kn, 5 m/s) today. South winds (15 kn, 8 m/s) tonight. Southeast winds (15 kn) on Friday becoming south winds (15 kn) Saturday through Monday.



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).





Satellite chlorophyll image and forecast winds for August 31, 2012 12Z with cell concentration sampling data from August 20 to 29 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).